

REMARKS

Initially, Applicant notes that remarks and amendments made by this paper are consistent with the proposals presented to the Examiner during the telephone call placed on August 22, 2007. As mentioned in the call, the Examiner is invited to call the Applicant's attorneys should any additional questions arise in response to this response or the amended claims.

By this paper claims 1 and 13 have been amended and no claims have been added or cancelled such that claims 1-2 and 4-32 remain pending, of which claims 1, 13, and 23 are the only independent claims at issue. Support for the amendments is found throughout the Specification, including the disclosure found in pages 11 and 12 of the Application as originally filed.

The Final Office Action, mailed July 24, 2007, considered and rejected claims 1-2 and 4-32 under 35 U.S.C. § 103(a) as being unpatentable over Alam et al. (US 6,324,544 B1), hereinafter Alam, in view of Huang et al. (US 6,477,543), hereinafter Huang.¹

As recited in the claims, the present invention is generally directed to embodiments for synchronizing data stores or replicas in a sync community. The system of the present invention promotes consistent and manageable synchronization across all back end data stores that synchronize with a particular data store. The embodiment of claim 1, for example, recites a system including a computer processor that executes a sync runtime module that provides services to multiple sync adapters. The services providing by the sync runtime module include a change enumeration service that compares a first knowledge of the first replica with a second knowledge of the second replica to enumerate changes that are described by the second

¹ Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

knowledge and absent from the first knowledge, wherein the knowledge of a replica comprises information describing a set of changes that the given replica is aware of and independent from the changes of other replicas. The system further contains a sync controller that instantiates a particular adapter such that the particular sync adapter utilizes the services to synchronize the first replica in the sync community with the second replica.

Independent claim 13 is closely related to independent claim 1, but instead recites a method rather than the system of claim 1. Independent claim 23 recites a computer program product that corresponds to the method of claim 13.

Now, with regard to the 103(a) rejections of record, it will be noted that all of the independent claims were rejected based on a combination of 2 references, Alam and Huang. Alam discloses first and second computing devices that each contain an object store with stores of objects indicative of file data. Synchronization components are provided to synchronize the objects while efficiently overcoming problems associated with synchronizing files between object stores. Huang is generally directed to embodiments for a synchronization proxy that serves as an intermediary between in performing update synchronization between clients. The Office Action cites Huang solely to demonstrate the general concept of having change enumeration occur using information describing a set of changes a replica is aware of.

In the Office Action, it is acknowledged that Alam does not disclose the concept of knowledge for use in change enumeration. Applicant respectfully submits that Huang fails to compensate for the inadequacies of Alam in at least this regard. For example, while Huang mentions that "... the sync logic for an application can be written to take advantage of any version and update history information available from the handhelds and their replica hosts...",

Huang fails to teach the concept of the knowledge having only changes that have occurred to the replica itself and independent from the changes to other replicas.

The current invention uses knowledge in a novel way that is not described within Huang. The knowledge contains a history of the changes to the data that the replica is aware of and is independent of what has occurred to other databases. As an example, when the replica is synchronized, the knowledge does not remember that it was synchronized, the knowledge only tracks the changes that were made during the synchronization. Because the knowledge is self contained without reference to past synchronizations or other replicas, it can easily synchronize with multiple replicas without requiring it to store any information about the other replicas. This can be contrasted with Huang, where it is expressly taught that the sync logic can be written to take advantage of *update history*, indicating that information about a prior synchronization is being obtained to expedite the synchronization process.

The cited passage of Huang does not teach anything beyond that which is acknowledged in the background of the Application, where a common synchronization technique involving keeping track of changes that have occurred subsequent to a previous specification is noted. The present invention overcomes the limitation of such a system when multiple replicas are present in the sync community using the concept of knowledge. Using knowledge, rather the common change tracking method, each replica within the sync community can sync with any other replica present within the sync community at any time, and at the same time, is not require to sync with every other replica in the sync community. In fact, using the present invention, a particular replica may not even be aware of the topology of the sync community or the number of replicas present, allowing replicas to be added or removed without affecting the abilities of remaining replicas to sync.

Because the combination of Alam and Huang do not teach at least the concept of knowledge comprising information describing a set of changes to a replica that the given replica is aware of and independent from other replicas as read in combination with the other elements of the claims, and instead merely discloses maintaining update history directed to expediting replication, the presently amended claims are patentable over the combination of Alam and Huang.

In view of the foregoing, Applicant respectfully submits that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time.² In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at 801-533-9800.

Dated this 23rd day of January, 2008.

Respectfully submitted,



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² It will be appreciated, however, that this should not be construed as Applicant acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice. Instead, Applicant reserves the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has relied on any Official Notice, explicitly or implicitly, Applicant specifically requests that the Examiner provide references supporting the teachings officially noticed, as well as the required motivation or suggestion to combine the relied upon notice with the other art of record.